<u>IN THE CLAIMS</u>:

The following is a complete listing of the claims, and replaces all earlier version and listings.

1.      (currently amended):  A recording apparatus that uses an ink-ejecting recording head and performs recording by ejecting black ink and at least one color ink onto a recording medium from the recording head, comprising:

extraction means for extracting, on the basis of recording data, at least one type <u>of</u> pixels<u>,</u> selected from <u>(1)</u> black adjacent pixels composed of pixels whose adjacent pixels are recorded with black ink, and <u>(2)</u> color adjacent pixels that include pixels whose adjacent pixels are recorded with color ink, from among the pixels constituting a black image;

data creating means for creating data that corresponds to color ink so that ~~a pixel is recorded with the color ink,~~ <u>recording with black ink and with color ink applied (or added)</u> according to a given ratio <u>is done</u>, on the black adjacent pixels or the color adjacent pixels extracted by the extraction means; and

recording control means for performing recording with the recording head on the basis of the recording data and the data created by the creating means.

2.      (original):  The recording apparatus according to claim 1, wherein the creating means creates, as data corresponding to the color ink, data obtained by using a mask pattern for creating pixels recorded according to a given ratio and processing the black adjacent pixels or the color adjacent pixels.

3. (original): The recording apparatus according to claim 2, wherein the creating means creates data that corresponds to color ink, based on the logical product of the mask pattern and either the black adjacent pixels or the color adjacent pixels.

4. (original): The recording apparatus according to claim 1, wherein the extraction means extracts both the black adjacent pixels and the color adjacent pixels; and

the creating means creates data that corresponds to color ink by using different ratios for recording pixels with color ink onto the black adjacent pixels and for recording pixels with color ink onto the color adjacent pixels.

5. (original): The recording apparatus according to claim 4, wherein the creating means creates data that corresponds to color ink by increasing the ratio for recording pixels with color ink onto the black adjacent pixels to be greater than the ratio for recording pixels with color ink onto the color adjacent pixels.

6. (original): The recording apparatus according to claim 5, wherein the creating means creates, as data corresponding to the color ink, data obtained by using a mask pattern for creating pixels recorded according to a given ratio and processing the black adjacent pixels or the color adjacent pixels, and uses different masking ratios for the mask patterns used in the masking of the black adjacent pixels and the color adjacent pixels.

7.　(original):　The recording apparatus according to claim 6, wherein a plurality of color inks corresponding to different colors are used as the color ink; and

the creating means uses the mask patterns corresponding to the plurality of color inks to create data corresponding to the plurality of color inks.

8.　(original):　The recording apparatus according to any of claims 1 through 7, wherein the recording control means records by ejecting black ink according to data that corresponds to black ink, and also records by ejecting color ink according to data obtained from the logical sum of data that corresponds to color ink in the recording data and data that corresponds to color ink created by the creating means.

9.　(currently amended):　The recording apparatus according to claim 1, wherein the extraction means extracts objective pixels as black adjacent pixels when there is more than a predetermined number of black pixels in a matrix which is composed of L x M (where L and M are integers expressed by 1, 3, 5, … n, n+2, and where[[in]] n is a positive integer) pixels and in which pixels constituting a black image are centered around the objective pixels.

10.　(currently amended):　recording apparatus according to claim 1, wherein the extraction means extracts objective pixels as color adjacent pixels when there is more than a predetermined number of color dot pixels in a matrix composed of L x M (where L and M are integers expressed by 1, 3, 5, … n, n+2, and where[[in]] n is a positive

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integer) pixels and in which pixels constituting a black image are centered around the objective pixels.

11. (withdrawn): The recording apparatus according to claim 1, further comprising thinning means for thinning black ink data from among the recording data;

Wherein the recording control means performs recording with black ink in accordance with the black ink data that has been thinned by the thinning means.

12. (withdrawn): The recording apparatus according to claim 11, wherein the thinning means uses different ratios of thinning black ink data for the black adjacent pixels and the color adjacent pixels.

13. (withdrawn): The recording apparatus according to claim 1, wherein when data that corresponds to color ink is not included in the recording data, extraction by the extraction means is not performed, and data that corresponds to color ink is created so that pixels are recorded with color ink at a predetermined ratio on an image recorded with data that corresponds to black ink.

14. (withdrawn): The recording apparatus according to claim 1, further comprising scanning means for scanning the recording head relative to the recording medium; and determination means for determining whether extraction by the extraction means and creation of data that corresponds to color ink by the creation means are performed in each scanning area in which recording is carried out by causing the recording

head to perform a single scan with the scanning means, on the basis of recording data included in the scanning areas; wherein the choice of whether or not extraction by the extraction means and creation of data that corresponds to color ink by the creation means are performed is controlled according to the determination results from the determination means.

15.     (withdrawn):  The recording apparatus according to claim 14, wherein the scanning direction when recording is performed during scanning with the scanning means is determined so that recording with color ink is performed prior to recording with black ink.

16.     (currently amended):  A data processing method for processing recording data in a recording apparatus that uses an ink-ejecting recording head and performs recording by ejecting black ink and at least one color ink onto a recording medium from the recording head, comprising:

an extraction step for extracting, on the basis of data for recording, at least one type of pixels, selected from (1) black adjacent pixels composed of pixels whose adjacent pixels are recorded with black ink, and (2) color adjacent pixels that include pixels whose adjacent pixels are recorded with color ink, from among the pixels constituting a black image; and

a data creating step for creating data that corresponds to color ink so that a pixel is recorded with the color ink, recording with black ink and with color ink applied (or

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added) according to a given ratio is done, on the black adjacent pixels or the color adjacent pixels extracted in the extraction step.

17.    (withdrawn):  A recording apparatus that uses an ink-ejecting recording head and performs recording by ejecting black ink and at least one color ink onto a recording medium from the recording head, comprising:

color conversion means for converting data that corresponds to a specific plurality of colors to data that corresponds to ink colors used in recording;

extraction means for extracting black adjacent pixels composed of pixels whose adjacent pixels are recorded with black ink from among the pixels constituting a black image on the basis of data used in recording and obtained by the conversion of the color conversion means;

data creating means for creating data that corresponds to color ink so that a pixel is recorded with the color ink, according to a given ratio, on the black adjacent pixels extracted by the extraction means; and

recording control means for performing recording with the recording head on the basis of the recording data and the data created by the creating means;

wherein the color conversion means converts data of a specific plurality of colors indicating black to data that corresponds to black ink and data that corresponds to at least one color ink.

18.    (withdrawn):  A data processing method for processing recording data in a recording apparatus that uses an ink-ejecting recording head and performs

recording by ejecting black ink and at least one color ink onto a recording medium from the recording head, comprising:

a color conversion step for converting data that corresponds to a specific plurality of colors to data that corresponds to ink colors used in recording;

an extraction step for extracting, on the basis of data used in recording and obtained by the conversion in the color conversion step, black adjacent pixels composed of pixels whose adjacent pixels are recorded with black ink from among the pixels constituting a black image; and

a data creating step for creating data that corresponds to color ink so that a pixel is recorded with the color ink, according to a given ratio, on the black adjacent pixels extracted by the extraction step;

wherein the color conversion step converts data of a specific plurality of colors indicating black to data that corresponds to black ink and data that corresponds to at least one color ink.


19. (original): An inkjet recording apparatus that uses an ink-ejecting recording head and performs recording by ejecting black ink and at least one color ink onto a recording medium from the recording head, comprising:

black dot adjacent pixel detection means for detecting black pixels to which black dots are adjacent;

color dot adjacent pixel detection means for detecting black pixels to which color dots are adjacent;

first color dot applying data creating means for creating color dot data to be applied by taking the logical product of the pixels adjacent to black dots and a first color dot applying mask;

second color dot applying data creating means for creating color dot data to be applied by taking the logical product of the pixels adjacent to color dots and a second color dot applying mask;

color dot applying data combining means for combining the color dot applying data created by the first color dot applying data creating means and the second color dot applying data creating means with original color data by taking their logical sum; and

recording means for performing recording based on the original black data and color data combined by the color dot applying data combining means.

20.    (original):  An inkjet recording apparatus that uses an ink-ejecting recording head and performs recording by ejecting black ink and at least one color ink onto a recording medium from the recording head, comprising:

color reading data switching means for switching between reading and not reading color data from memory according to a color dot count;

black dot adjacent pixel detection means for detecting black pixels to which black dots are adjacent;

color dot adjacent pixel detection means for detecting black pixels to which color dots are adjacent;

first color dot applying data creating means for creating color dot data applied by taking the logical product of the pixels adjacent to black dots and a first color dot applying mask;

second color dot applying data creating means for creating color dot data applied by taking the logical product of the pixels adjacent to color dots and a second color dot applying mask;

color dot applying data combining means for combining the color dot applying data created by the first color dot applying data creating means and the second color dot applying data creating means with original color data by taking their logical sum;

third color dot applying data creating means for creating color dot data applied by taking the logical product of black dots and a third color dot applying mask;

printing color data selection means that uses either the data combined by the color dot applying data combining means or the third color dot applying data as printing color data; and

recording means for performing recording based on original black data and the color data combined by the printing color data selection means.